

EX03-078C-US patentin.txt  
SEQUENCE LISTING

<110> EXELIXIS, INC.  
<120> MAP2K6 AS MODIFIER OF BRANCHING MORPHOGENESIS AND METHODS OF USE  
<130> EX03-078C-US  
<150> US 60/420,554  
<151> 2002-10-23  
<160> 3  
<170> PatentIn version 3.2  
<210> 1  
<211> 2924  
<212> DNA  
<213> Homo sapiens  
<400> 1  
ggcttctgg tcgccccacc tctgaagggtt ccagaatcga tagtgaattc gtggttccaa 60  
gtttggagct tttagctgcc agccctggcc catcatgtag ctgcagcaca gccttcccta 120  
acgttgcaac tggggggaaaa atcactttcc agtctgtttt gcaagggtgt catttccatc 180  
ttgattccct gaaagtccat ctgctgcattc ggtcaagaga aactccactt gcatgaagat 240  
tgcacgcctg cagcttgcat ctttggca aaacttagcta cagaagagaa gcaaggcaaa 300  
gtctttgtg ctccccctccc ccatcaaagg aaagggggaaa atgtctcagt cgaaaggcaa 360  
gaagcgaaac cctggcctta aaattccaaa agaagcattt gaacaacctc agaccagttc 420  
cacaccacct cgagatttag actccaaggc ttgcatttctt attggaaatc agaactttga 480  
ggtaaggca gatgacctgg agcctataat ggaactggga cgaggtgcgt acgggggtggt 540  
ggagaagatg cggcacgtgc ccagcggca gatcatggca gtgaagcggta tccgagccac 600  
agtaaatagc caggaacaga aacggctact gatggatttg gatatttcca tgaggacggt 660  
ggactgtcca ttcactgtca cctttatgg cgcactgttt cgggagggtg atgtgtggat 720  
ctgcattggag ctcattggata catcaactaga taaattctac aaacaagtta ttgataaaagg 780  
ccagacaatt ccagaggaca tcttagggaa aatagcagtt tctattgtaa aagcattaga 840  
acatttacat agtaagctgt ctgtcattca cagagacgtc aagcattcta atgtactcat 900  
caatgctctc ggtcaagtga agatgtgcga ttttggaaatc agtggctact tgggtggactc 960  
tggctaaa acaattgtatc caggttgcaaa accatacatg gcccctgaaa gaataaacc 1020  
agagctcaac cagaagggat acagtgtgaa gtctgacatt tggagtctgg gcatcacat 1080  
gattgagttg gccatccttc gatttcccta tgattcatgg ggaactccat ttcagcagct 1140  
caaacaggtg gtagaggagc catcgccaca actcccagca gacaagttct ctgcagagtt 1200  
tggactttt acctcacagt gcttaaagaa gaattccaaa gaacggccta catacccaga 1260

## EX03-078C-US patentin.txt

gctaatgcaa	catccat	ttt tcaccctaca	tgaatccaaa	ggaacagatg	tggcatctt	1320	
tgtaaaactg	attcttggag	actaaaaagc	agtggactta	atcggttgac	cctactgtgg	1380	
attgggtgggt	ttcggggtga	agcaagttca	ctacagcatc	aatagaaagt	catctttgag	1440	
ataatttaac	cctgcctctc	agagggtttt	ctctcccaat	tttctttta	ctccccctct	1500	
taagggggccc	tttggaatcta	tagtatagaa	tgaactgtct	agatggatga	attatgataa	1560	
aggcttagga	cttcaaaagg	tgattaaata	tttataatgatg	tgtcatatga	gtcctcaagc	1620	
ttctcagact	tctcttattc	tttacaaaat	gaatgcattg	gccctgacaa	aaaggtgcta	1680	
cggtagtgat	gaaattataa	gtagatttg	agtttgc	ccccc	atttatttattt	1740	
tgtttaagtg	cttgggtgaa	aagattccat	tttataacaag	aaggagatt	caaaaaaaaaa	1800	
atataaggtt	gggttagcaa	tatttatagg	gcttttattt	tttatagtca	attgtgtctg	1860	
tggtccagaa	gaaatttattt	aatatgcac	tttgagaata	ttataaaaaat	atcaaaaaagg	1920	
agctcttctt	gtgaaatgtc	tgttccagct	gttgtgactg	ctgccat	tttggaaacatc	1980	
tgc	ccaaatcc	tgggtgatca	ccacatctt	taggggaagt	gacaagatgc	tctggtcata	2040
ctcttttcc	caactttgga	aaacataaaa	atcactcata	taacagctca	aagagtaaaa	2100	
catttggttc	ttctgacact	tgtggatag	tattgtgga	aagtgatttgc	taatatgatt	2160	
ttatatccac	ctacctattc	atctacctgt	gtgtatgt	gtgtttgtgt	gtctatttgg	2220	
caattcacaa	gtcctgccaa	gtgggttcta	tgagcatctc	tgttggtaa	ggaggacaat	2280	
tgtcagttt	gagggggaca	tgtgttaat	cacagaaaaa	aatgggtgcct	tcttctgcgt	2340	
ttgtccctcc	tgccatgtgt	aagttgtaaag	gattgcctt	gttgttataatg	tactctttgg	2400	
ctttgttgt	ttgttttctt	tttcagtgaa	gcagccttac	tattcataga	agggctagaa	2460	
taggagaaaa	tgaaaggtag	ttagtaattc	tttgataaga	tgaggaaata	atgggaaagg	2520	
ttgaattaaat	tcctgggcat	ggactaccag	atgaccacaa	gttgcgttga	ggccgcacatc	2580	
ttcttcagca	gcgtgcaata	gctggctcct	ctataggaga	tgagcttcat	tgggagttcc	2640	
tagcaagttg	actaaacagc	aaaagttctt	tctcggttgg	aaatataaccc	acaggttcta	2700	
tgatttgttag	ctctaggttt	cttgcgtatc	aaggagtgaa	gtattgtaca	ggggaaaat	2760	
agacctatga	taaataaacca	ggaagcattg	ctttggaca	aggaagaaca	gagggttttgc	2820	
atttaaaaaa	gaagaaaaaa	aaaccttatt	ttttcttct	tggcctcaag	ttcaatatgg	2880	
agaggattgc	ttccctgaat	cctctttcc	ttcccccttt	agag		2924	

<210> 2  
 <211> 2820  
 <212> DNA  
 <213> Homo sapiens

<400> 2

## EX03-078C-US patentin.txt

gcagagtgtt	gctgtgtgt	cttgtgattt	gtattttatt	tgatgtaaac	gtgaaggcag	60
agtatttct	aacactgtaa	ttcaactagg	ttttgtgtct	cctggatcta	ttttttttc	120
ttgttgttct	gaggagctga	tatacttgga	aatatttagt	ttaagatatg	cagatgtcca	180
acttatatac	atagtcaagg	gtttagagtc	tggagacagg	aggctggcaa	tttcaactag	240
ggggcaggc	aggcaagaag	cgaaaccctg	gccttaaaat	tccaaaagaa	gcatttgaac	300
aacctcagac	cagttccaca	ccaccccgag	atttagactc	caaggcttgc	atttctattg	360
gaaatcagaa	cttgaggtg	aaggcagatg	acctggagcc	tataatggaa	ctgggacgag	420
gtgcgtacgg	ggtggtggag	aagatgcggc	acgtgcccag	cgggcagatc	atggcagtga	480
agcggatccg	agccacagta	aatagccagg	aacagaaaacg	gctactgtg	gatttggata	540
tttccatgag	gacggtggac	tgtccattca	ctgtcacctt	ttatggcgca	ctgtttcggg	600
agggtgatat	gtggatctgc	atggagctca	tggatacatc	actagataaa	ttctacaaac	660
aagttattga	taaaggccag	acaattccag	aggacatctt	agggaaaata	gcagtttcta	720
ttgtaaaagc	attagaacat	ttacatagta	agctgtctgt	cattcacaga	gacgtcaagc	780
cttctaattgt	actcatcaat	gctctcggtc	aagtgaagat	gtgcgatttt	ggaatcagtg	840
gctacttggt	ggactctgtt	gctaaaacaa	ttgatgcagg	ttgcaaacca	tacatggccc	900
ctgaaagaat	aaacccagag	ctcaaccaga	agggatacag	tgtgaagtct	gacatttgg	960
gtctggcat	cacgtgatt	gagttggcca	tccttcgatt	tccctatgat	tcatgggaa	1020
ctccatttca	gcagctcaa	caggtggtag	aggagccatc	gccacaactc	ccagcagaca	1080
agttctctgc	agagttgtt	gactttacct	cacagtgcctt	aaagaagaat	tccaaagaac	1140
ggcctacata	cccagagcta	atgcaacatc	cattttcac	cctacatgaa	tccaaaggaa	1200
cagatgtggc	atctttgtt	aaactgattc	ttggagacta	aaaagcagtg	gacttaatcg	1260
gttgacccta	ctgtggattt	gtgggtttcg	gggtgaagca	agttcaactac	agcatcaata	1320
gaaagtcatc	tttgagataa	tttaaccctg	cctctcagag	ggttttctct	cccaattttc	1380
tttttactcc	ccctcttaag	ggggccttgg	aatctatagt	atagaatgaa	ctgtcttagat	1440
ggatgaatta	tgataaaggc	ttaggacttc	aaaaggtgat	taaatattta	atgatgtgtc	1500
atatgagtcc	tcaagcttct	cagacttctc	ttattcttta	caaaatgaat	gcattggccc	1560
tgacaaaaag	gtgctacggt	agtgtatgaaa	ttataagtag	attttagtgg	tgtcccattt	1620
attattttaa	tatttatgtt	taagtgcctg	gttggaaaaga	ttccattttta	tacaagaagg	1680
gagattcaaa	aaaaaaatat	aagggtgggt	tagcaatatt	tataggcctt	ttatttttta	1740
agttcaattt	tgtctgtggt	ccagaagaaa	ttattnataa	tgcattttg	agaatattat	1800
aaaaatatca	aaaaggagct	cttcttgcga	aatgtctgtt	ccagctgttg	tgactgctgc	1860
cattttggaa	aacatctgcc	caatccctggg	tgatcaccac	atcttttagg	ggaagtgaca	1920

EX03-078C-US patentin.txt

agatgctctg gtcatactct	ttttcccaac tttggaaaac ataaaaatca	ctcatataac	1980
agctcaaaga gtaaaacatt	tggttcttct gacacttgc	gtatagtatt agtgaaagt	2040
gatttgaat atgattttat	atccacctac ctattcatct	acctgtgtgt atgtgtgt	2100
ttgtgtgtct atttggcaat	tcacaagtcc tgccaagtgg	tttctatgag catctctgtt	2160
tggtaaggag gacaattgtc	agtttgagg gggacatgtg	ttaaatcaca gaaaaaaatg	2220
gtgccttctt ctgcgttgt	ccctcctgcc atgtgaagt	tgtaggatt gcctttgtag	2280
ttaatgtact cttggcttt	gtttgttgt tttcttcttc	agtgaagcag ccttactatt	2340
catagaaggg ctagaatagg	agaaaatgaa aggtagttag	taattctttg ataagatgag	2400
gaaataatgg gaaagggtga	attaattcct gggcatggac	taccagatga ccacaagttg	2460
cgttggggcc gcatcttct	tcagcagcgt gcaatagctg	gctcctctat aggagatgag	2520
cttcattggg agttcctagc	aagttgacta aacagcaaaa	gttcttctc gtgggtaaat	2580
atacccacag gttctatgat	ttgttagctct aggtttcttg	atgatcaagg agtgaagtaa	2640
ttgacagggaa aaatatacgt	ctatgataaa taaccaggaa	gcattgctt tggacaagga	2700
agaaacagagg gttttgattt	taaaaagaag aaaaaaaaaac	cttattttt cttcttggc	2760
ctcaagttca atatggagag	gattgcttcc ctgaatcctc	tcttccttcc ccttttagag	2820

<210> 3  
<211> 334  
<212> PRT  
<213> Homo sapiens

<400> 3

Met Ser Gln Ser Lys Gly Lys Lys Arg Asn Pro Gly Leu Lys Ile Pro  
1 5 10 15

Lys Glu Ala Phe Glu Gln Pro Gln Thr Ser Ser Thr Pro Pro Arg Asp  
20 25 30

Leu Asp Ser Lys Ala Cys Ile Ser Ile Gly Asn Gln Asn Phe Glu Val  
35 40 45

Lys Ala Asp Asp Leu Glu Pro Ile Met Glu Leu Gly Arg Gly Ala Tyr  
50 55 60

Gly Val Val Glu Lys Met Arg His Val Pro Ser Gly Gln Ile Met Ala  
65 70 75 80

Val Lys Arg Ile Arg Ala Thr Val Asn Ser Gln Glu Gln Lys Arg Leu  
85 90 95

EX03-078C-US patentin.txt

Leu Met Asp Leu Asp Ile Ser Met Arg Thr Val Asp Cys Pro Phe Thr  
100 105 110

Val Thr Phe Tyr Gly Ala Leu Phe Arg Glu Gly Asp Val Trp Ile Cys  
115 120 125

Met Glu Leu Met Asp Thr Ser Leu Asp Lys Phe Tyr Lys Gln Val Ile  
130 135 140

Asp Lys Gly Gln Thr Ile Pro Glu Asp Ile Leu Gly Lys Ile Ala Val  
145 150 155 160

Ser Ile Val Lys Ala Leu Glu His Leu His Ser Lys Leu Ser Val Ile  
165 170 175

His Arg Asp Val Lys Pro Ser Asn Val Leu Ile Asn Ala Leu Gly Gln  
180 185 190

Val Lys Met Cys Asp Phe Gly Ile Ser Gly Tyr Leu Val Asp Ser Val  
195 200 205

Ala Lys Thr Ile Asp Ala Gly Cys Lys Pro Tyr Met Ala Pro Glu Arg  
210 215 220

Ile Asn Pro Glu Leu Asn Gln Lys Gly Tyr Ser Val Lys Ser Asp Ile  
225 230 235 240

Trp Ser Leu Gly Ile Thr Met Ile Glu Leu Ala Ile Leu Arg Phe Pro  
245 250 255

Tyr Asp Ser Trp Gly Thr Pro Phe Gln Gln Leu Lys Gln Val Val Glu  
260 265 270

Glu Pro Ser Pro Gln Leu Pro Ala Asp Lys Phe Ser Ala Glu Phe Val  
275 280 285

Asp Phe Thr Ser Gln Cys Leu Lys Lys Asn Ser Lys Glu Arg Pro Thr  
290 295 300

Tyr Pro Glu Leu Met Gln His Pro Phe Phe Thr Leu His Glu Ser Lys  
305 310 315 320

Gly Thr Asp Val Ala Ser Phe Val Lys Leu Ile Leu Gly Asp  
325 330

EX03-078C-US patentin.txt  
SEQUENCE LISTING

<110> EXELIXIS, INC.  
<120> MAP2K6 AS MODIFIER OF BRANCHING MORPHOGENESIS AND METHODS OF USE  
<130> EX03-078C-US  
<150> US 60/420,554  
<151> 2002-10-23  
<160> 3  
<170> PatentIn version 3.2  
<210> 1  
<211> 2924  
<212> DNA  
<213> Homo sapiens  
<400> 1  
ggcttctgg tcggcccacc tctgaagggtt ccagaatcga tagtgaattc gtggttccaa 60  
gtttggagct tttagctgcc agccctggcc catcatgtag ctgcagcaca gccttcccta 120  
acgttgcac ac tgggggaaaa atcactttcc agtctgtttt gcaagggtgt catttccatc 180  
ttgattccct gaaagtccat ctgctgcattc ggtcaagaga aactccactt gcatgaagat 240  
tgcacgcctg cagcttgcattt ctttggca aaacttagcta cagaagagaa gcaaggcaaa 300  
gtctttgtg ctccccctccc ccatcaaagg aaaggggaaa atgtctcagt cgaaaggcaa 360  
gaagcgaaac cctggcctta aaattccaaa agaagcattt gaacaacctc agaccagttc 420  
cacaccacct cgagatttag actccaaggc ttgcatttctt attggaaatc agaactttga 480  
ggtaaggca gatgacctgg agcctataat ggaactggga cgaggtgcgt acgggggtgg 540  
ggagaagatg cggcacgtgc ccagcggca gatcatggca gtgaagcggta tccgagccac 600  
agtaaatagc caggaacaga aacggctact gatggatttg gatatttcca tgaggacggt 660  
ggactgtcca ttcactgtca cctttatgg cgcaactgtttt cgggagggtg atgtgtggat 720  
ctgcattggag ctcattggata catcaactaga taaattctac aaacaagtta ttgataaaagg 780  
ccagacaatt ccagaggaca tcttagggaa aatagcattt tctattgtaa aagcattaga 840  
acatttacat agtaagctgt ctgtcattca cagagacgtc aagcattcta atgtactcat 900  
caatgctctc ggtcaagtga agatgtgcga ttttggaaatc agtggctact tgggtggactc 960  
tggctaaa acaattgtatc caggttgcaaa accatacatg gcccctgaaa gaataaaaccc 1020  
agagctcaac cagaaggat acagtgtgaa gtctgacatt tggagtctgg gcatcagat 1080  
gattgagttg gccatccttc gatttcccta tgattcatgg ggaactccat ttcagcagct 1140  
caaacaggtg gtagaggagc catcgccaca actcccagca gacaaggatctt ctgcagagtt 1200  
tggactttt acctcacagt gcttaaagaa gaattccaaa gaacggccta cataccaga 1260

EX03-078C-US patentin.txt

gctaatgcaa	catccat	tcacc	taca	tgaatccaaa	ggaacagatg	tggcat	1320
tgtaaaactg	attcttggag	actaaaaagc	agtggactt	atcggttgc	cctactgtgg		1380
attgggtgggt	ttcgggggtga	agcaagttca	ctacagcatc	aatagaaagt	catctttag		1440
ataatttaac	cctgcctc	agagggtttt	ctctcccaat	tttctttta	ctccccctc		1500
taagggggcc	ttggaatcta	tagtata	gaa	tgaactgtct	agatggatg	attatgataa	1560
aggcttagga	cttcaaagg	tgat	taata	ttaatgat	tgtcatatg	gtcctcaagc	1620
ttctcagact	tcttttattc	tttacaaat	gaatgcatt	gccctgacaa	aaagg	tgct	1680
cggtagt	gat	gaaattataa	gtagattgt	agtttgc	ccc	atttattt	1740
tgtttaagt	cttgggtgaa	aagattccat	tttata	caag	aagg	gat	1800
atataagg	ttttagg	gcttttattt	ttttaagtt	ca	aaaa	aaaa	1860
tggtccagaa	gaaattattt	aatatgc	tttgaga	at	aaaaa	agg	1920
agctcttctt	gtgaaatg	tc	tgttccag	ct	tttgc	ttt	1980
tgc	ccaaatcc	tgggtgat	ccacat	ttt	taggg	gac	2040
ctcttttcc	caacttgg	aaacata	aa	atc	actc	ata	2100
catttgg	ttctgac	act	tgtt	at	ttgtt	gat	2160
ttatatccac	ctac	ctt	atc	act	gtt	atgtt	2220
caattcacaa	gtc	ctg	ccaa	gtg	ttt	c	2280
tgtcagttt	gagggg	aca	tgtt	aaat	cac	aaaa	2340
ttgtccctcc	tgcc	atgt	gt	ttt	tttgc	ct	2400
ctttgtt	ttt	tttctt	ttc	act	gtgaa	gc	2460
taggagaaaa	tga	aaagg	tag	tgt	tttgc	tttgc	2520
ttgaat	ttc	tttgg	cat	gg	actacc	atgacc	2580
ttttcagca	gcgt	gcata	gctgg	cct	ctat	aggaga	2640
tagcaagtt	act	aaac	agc	aaa	agg	ttct	2700
tgtttttag	ctc	tag	ttt	ttt	tttgc	tttgc	2760
agacctat	taa	ataac	cca	gga	agg	catt	2820
at	ttt	aaaa	aa	aa	tttgc	tttgc	2880
agaggatt	ttcc	ctg	aat	cct	tttcc	tttcc	2924

<210> 2  
 <211> 2820  
 <212> DNA  
 <213> Homo sapiens

<400> 2

## EX03-078C-US patentin.txt

gcagagtgtt	gctgtgtgt	cttgtgattt	gtattttatt	tgatgtaaac	gtgaaggcag	60
agtatttct	aacactgtaa	ttcaactagg	ttttgtgtct	cctggatcta	ttttttttc	120
ttgttgttct	gaggagctga	tatacttgga	aatatttagt	ttaagatatg	cagatgtcca	180
acttatatac	atagtcaagg	gtttagagtc	tggagacagg	aggctggcaa	tttcaactag	240
ggggcaggc	aggcaagaag	cgaaaccctg	gcctaaaaat	tccaaaagaa	gcatttgaac	300
aacctcagac	cagttccaca	ccaccccgag	attagactc	caaggcttgc	atttcttattg	360
gaaatcagaa	ctttgaggtg	aaggcagatg	acctggagcc	tataatggaa	ctgggacgag	420
gtgcgtacgg	ggtggtggag	aagatgcggc	acgtccccag	cgggcagatc	atggcagtga	480
agcggatccg	agccacagta	aatagccagg	aacagaaacg	gctactgtg	gatttggata	540
tttccatgag	gacggtggac	tgtccattca	ctgtcacctt	ttatggcgca	ctgtttcggg	600
agggtgatat	gtggatctgc	atggagctca	tggatacatc	actagataaa	ttctacaaac	660
aagttattga	taaaggccag	acaattccag	aggacatctt	agggaaaata	gcagtttcta	720
ttgtaaaagc	attagaacat	ttacatagta	agctgtctgt	cattcacaga	gacgtcaagc	780
cttctaattgt	actcatcaat	gctctcggtc	aagtgaagat	gtgcgatttt	ggaatcagtg	840
gctacttggt	ggactctgtt	gctaaaacaa	ttgatgcagg	ttgcaaacca	tacatggccc	900
ctgaaagaat	aaacccagag	ctcaaccaga	agggatacag	tgtgaagtct	gacatttgg	960
gtctggccat	cacgtgatt	gagttggcca	tccttcgatt	tccctatgat	tcatgggaa	1020
ctccatttca	gcagctcaa	caggtggtag	aggagccatc	gccacaactc	ccagcagaca	1080
agttctctgc	agagttgtt	gactttacct	cacagtgcct	aaagaagaat	tccaaagaac	1140
ggcctacata	cccagagcta	atgcaacatc	cattttcac	cctacatgaa	tccaaaggaa	1200
cagatgtggc	atctttgtt	aaactgattc	ttggagacta	aaaagcagtg	gacttaatcg	1260
gttgacccta	ctgtggattt	gtgggtttcg	gggtgaagca	agttcactac	agcatcaata	1320
gaaagtcatc	tttgagataa	tttaaccctg	cctctcagag	ggtttctct	cccaattttc	1380
tttttactcc	ccctcttaag	ggggccttgg	aatctatagt	atagaatgaa	ctgtcttagat	1440
ggatgaatta	tgataaaggc	ttaggacttc	aaaaggtgat	taaatatttta	atgtgtgtc	1500
atatgagtcc	tcaagttct	cagacttctc	ttattctta	caaaatgaat	gcattggccc	1560
tgacaaaaag	gtgctacgg	agtgtatgaaa	ttataagtat	attttagttt	tgtcccattt	1620
attattttaa	tatttatgtt	taagtgcctg	gttggaaaaga	ttccattttta	tacaagaagg	1680
gagattcaaa	aaaaaaatat	aagggtgggt	tagcaatatt	tataggcctt	ttatttttta	1740
agttcaattt	tgtctgtgg	ccagaagaaa	ttattnataa	tgcattttg	agaatattat	1800
aaaaatatca	aaaaggagct	cttcttgtga	aatgtctgtt	ccagctgttg	tgactgctgc	1860
catttttgg	aacatctgcc	caatcctggg	tgatcaccac	atcttttagg	ggaagtgaca	1920

EX03-078C-US patentin.txt

agatgctctg gtcatactct	ttttcccaac tttggaaaac ataaaaatca	ctcatataac	1980
agctcaaaga gtaaaacatt	tggttttct gacacttgc	gtatagtatt agtggaaagt	2040
gattttaat atgattttat	atccacctac ctattcatct	acctgtgtgt atgtgtgt	2100
ttgtgtgtct atttggcaat	tcacaagtcc tgccaagtgg	tttctatgag catctctgtt	2160
tggtaaggag gacaattgtc	agtttgagg gggacatgtg	ttaaatcaca gaaaaaaatg	2220
gtgccttctt ctgcgttgt	ccctcctgcc atgtgtaagt	tgtaaggatt gcctttag	2280
ttaatgtact ctttgcttt	gtttgttgt tttcttctc	agtgaagcag cttactatt	2340
catagaaggg ctagaatagg	agaaaatgaa aggtagtgag	taattctttg ataagatgag	2400
gaaataatgg gaaagggttga	attaattcct gggcatggac	taccagatga ccacaagttg	2460
cgttggggcc gcatcttct	tcagcagcgt gcaatagctg	gctcctctat aggagatgag	2520
cttcattggg agttcctagc	aagttgacta aacagcaaaa	gttcttctc gtggtaat	2580
atacccacag gttctatgat	ttgttagctct aggttcttg	atgatcaagg agtgaagtaa	2640
ttgacaggga aaatataagac	ctatgataaa taaccaggaa	gcattgctt tggacaagga	2700
agaacagagg gttttgattt	taaaaagaag aaaaaaaaaac	cttattttt ctttcttggc	2760
ctcaagttca atatggagag	gattgcttcc ctgaatcctc	tcttccttcc ctttttagag	2820

<210> 3  
<211> 334  
<212> PRT  
<213> Homo sapiens

<400> 3

Met Ser Gln Ser Lys Gly Lys Lys Arg Asn Pro Gly Leu Lys Ile Pro  
1 5 10 15

Lys Glu Ala Phe Glu Gln Pro Gln Thr Ser Ser Thr Pro Pro Arg Asp  
20 25 30

Leu Asp Ser Lys Ala Cys Ile Ser Ile Gly Asn Gln Asn Phe Glu Val  
35 40 45

Lys Ala Asp Asp Leu Glu Pro Ile Met Glu Leu Gly Arg Gly Ala Tyr  
50 55 60

Gly Val Val Glu Lys Met Arg His Val Pro Ser Gly Gln Ile Met Ala  
65 70 75 80

Val Lys Arg Ile Arg Ala Thr Val Asn Ser Gln Glu Gln Lys Arg Leu  
85 90 95

EX03-078C-US patentin.txt

Leu Met Asp Leu Asp Ile Ser Met Arg Thr Val Asp Cys Pro Phe Thr  
100 105 110

Val Thr Phe Tyr Gly Ala Leu Phe Arg Glu Gly Asp Val Trp Ile Cys  
115 120 125

Met Glu Leu Met Asp Thr Ser Leu Asp Lys Phe Tyr Lys Gln Val Ile  
130 135 140

Asp Lys Gly Gln Thr Ile Pro Glu Asp Ile Leu Gly Lys Ile Ala Val  
145 150 155 160

Ser Ile Val Lys Ala Leu Glu His Leu His Ser Lys Leu Ser Val Ile  
165 170 175

His Arg Asp Val Lys Pro Ser Asn Val Leu Ile Asn Ala Leu Gly Gln  
180 185 190

Val Lys Met Cys Asp Phe Gly Ile Ser Gly Tyr Leu Val Asp Ser Val  
195 200 205

Ala Lys Thr Ile Asp Ala Gly Cys Lys Pro Tyr Met Ala Pro Glu Arg  
210 215 220

Ile Asn Pro Glu Leu Asn Gln Lys Gly Tyr Ser Val Lys Ser Asp Ile  
225 230 235 240

Trp Ser Leu Gly Ile Thr Met Ile Glu Leu Ala Ile Leu Arg Phe Pro  
245 250 255

Tyr Asp Ser Trp Gly Thr Pro Phe Gln Gln Leu Lys Gln Val Val Glu  
260 265 270

Glu Pro Ser Pro Gln Leu Pro Ala Asp Lys Phe Ser Ala Glu Phe Val  
275 280 285

Asp Phe Thr Ser Gln Cys Leu Lys Lys Asn Ser Lys Glu Arg Pro Thr  
290 295 300

Tyr Pro Glu Leu Met Gln His Pro Phe Phe Thr Leu His Glu Ser Lys  
305 310 315 320

Gly Thr Asp Val Ala Ser Phe Val Lys Leu Ile Leu Gly Asp  
325 330